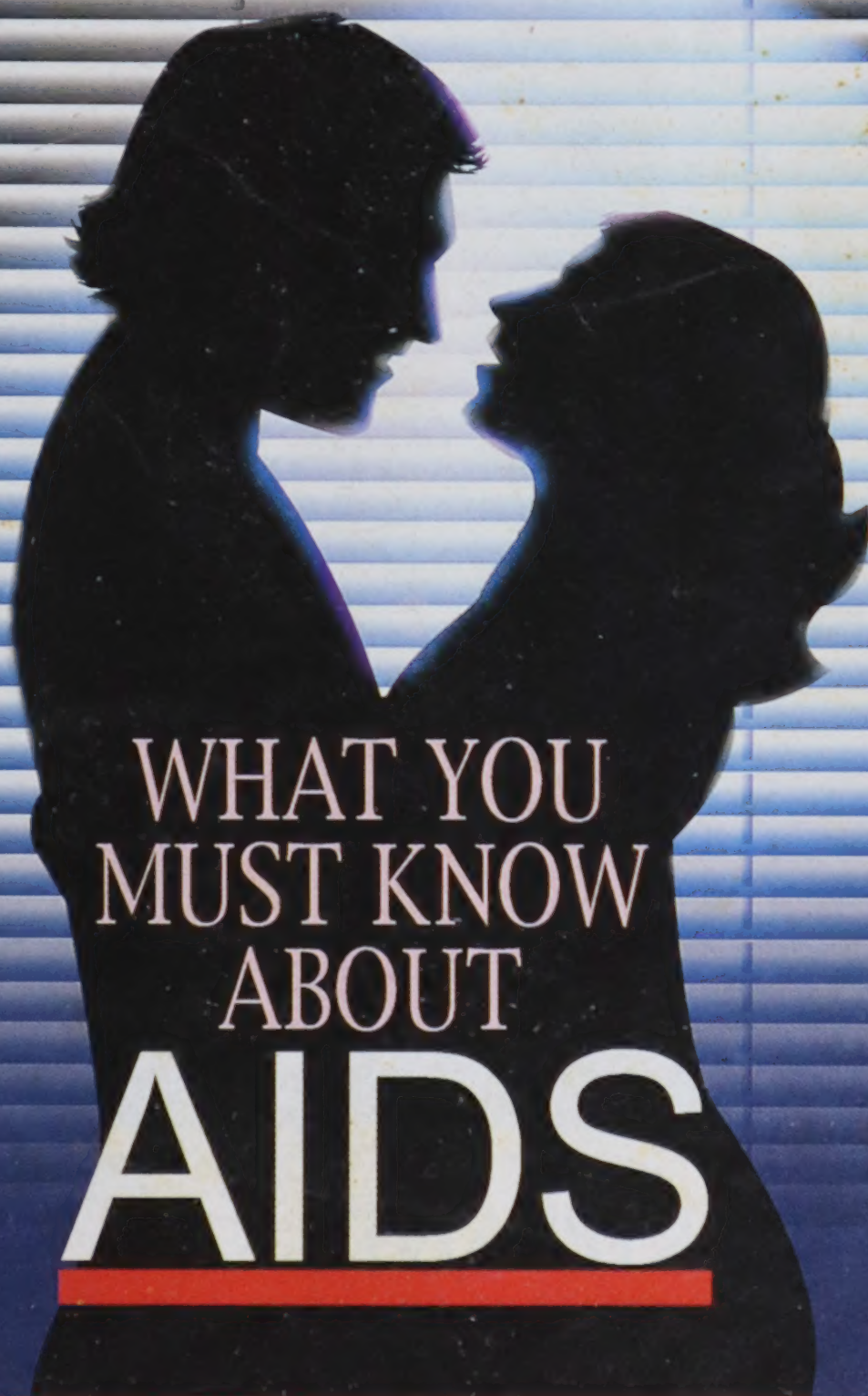


TheWeek

AUG 19, 2001



WHAT YOU
MUST KNOW
ABOUT
AIDS

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LAYOUT/B. MANOJKUMAR



Everyone's problem

In 1981 the US Centers for Diseases Control reported a rare type of pneumonia in gay men. The immune system of these patients had failed for no apparent reason. Soon more such cases surfaced and the US health officials called it AIDS (acquired immune deficiency syndrome).

Almost two decades later AIDS, according to the United Nations reports in 1999, is the fourth largest killer after heart disease, stroke and respiratory infections. WHO/UNAIDS estimates that as of December 2000, 36.1 million people have been infected with HIV all over the world and 21.8 million deaths have occurred due to AIDS since the start of the epidemic. In the year 2000 alone, 3 million people died of AIDS and 5.3 million were infected. South Africa has the largest number of infected people—4.2 million. India follows with 3.86 million cases.

The HIV/AIDS epidemic is

one of the most serious health problems in India. HIV infection was first detected in India in 1986 among prostitutes in Chennai. Awareness level was abysmal and the virus spread fast.

An HIV surveillance by the government of India during 1986 assessed the geographical spread of the infection and the major modes of transmission. Results were alarming—the infection had spread to all parts of the country and heterosexual transmission was the major mode of transmission in India. Testing facilities were made available in many parts of the country. NACO was set up in 1991, under the ministry of health and family welfare to work for the prevention and control of HIV/AIDS in India. The ministry, however, had set up a National AIDS Committee in 1986 after HIV was first discovered in the country.

According to NACO, by mid-2000, 3.86 million Indians were infected with the virus. Globally,

the epidemic continues to take its toll with around 16,000 cases every day.

The National AIDS Control Programme under NACO developed a national public health programme in HIV/AIDS prevention and control, and the phase-1 of the programme was implemented between 1992 and 1999. The second phase of the programme which extends from 1999 to 2004, shifts its focus to changing behaviour through intervention for high risk groups. It also aims at protecting human rights by encouraging voluntary counselling and testing and discouraging mandatory testing.

The NACO has set up Sentinel surveillance to monitor trends of HIV infection among high-risk groups as well as low risk groups of populations. It has established 320 sentinel sites in identified clinics all over the country to collect data on a regular basis in order to monitor trends of HIV infection in

• STD, Injected Drug Users (IDU)
• and Men having Sex with Men
• (MSM) in high-risk groups and
• in antenatal women, which is
• considered as an index of gen-
• eral population. The sentinel
• surveillance data shows high
• prevalence levels among high-
• risk groups and infections have
• started percolating from these
• risk groups to the general popu-
• lation as evident from data of
• antenatal clinics.

• Anybody can be infected with
• HIV, and hence, creating aware-
• ness, both among the infected
• and the healthy people, about
• how it spreads and how the dis-
• ease can be prevented is very
• important.

• Besides government's efforts
• at preventing and controlling
• AIDS by providing low-cost care
• and identifying high risk commu-
• nities and assisting them, NGOs
• are contributing through activi-
• ties like sex education and reach-
• ing out to marginalised groups
• like prostitutes, intravenous drug
• users and homosexuals.



Fatal virus

The human immunodeficiency virus HIV has been responsible for the new epidemic that emerged worldwide in the last two decades. HIV, which is about one sixteen thousandth the size of a head of a pin, has devastated human civilisation perhaps like no other microbe has.

Structure

The HIV has an envelop and a core which contains RNA and three enzymes—reverse transcriptase, protease and integrase. The outer covers are made of proteins and glycoproteins. On the envelop are knob-like projections made of glycoproteins.

Two types of HIV have been identified so far. While HIV-1 is found worldwide, HIV-2 is mostly found in West Africa and now in some Asian countries.

Infection

The HIV virus causes a weakness of the immune system. It attacks the helper T-lymphocytes which are a fundamental part of our immune system. The virus almost

fully specialises on these white blood cells since these have CD4 molecules on the surface to which the AIDS virus binds.

The virus also binds to a co-receptor on the cell surface. There are some other cells in the body like the macrophages and some cells in the skin and lymph nodes which have CD4 receptors. The HIV binds to these cells as well, remain there and emerge later.

Once the virus binds to the host T cell, there is no stopping it. The viral membrane fuses with the T cell membrane enabling the viral RNA to enter the cell. The enzyme reverse transcriptase converts this genetic material into DNA, which then joins with the DNA of the host cell with the help of Integrase, a HIV enzyme. All this happens within half a day after infection. This DNA is used to make several viral RNAs to form new viruses. These migrate to the membrane of the host cell and through a process called budding leave the host and go on to infect other cells.

The HIV destroys helper T-lymphocytes and as a result the

CD4 cell count drops from the normal 800-1,000 cells per cubic millimetre of blood to 400-600 cells. About three weeks into the infection, the person shows symptoms like fever, enlarged lymph nodes and muscle pain. But these symptoms recede as

- the body's immune system tries to fight the virus. Antibodies are produced to fight HIV in the blood.
- By six months, the viral level reaches a constant and on this depends the rate of progress of the disease.

What is AIDS?

A person can transmit the virus even when he/she seems apparently healthy and shows no symptoms. Many infected persons may not show symptoms for years. But over a period of time the immune system weakens. The T-cell count falls, and a person is said to have AIDS when the count is below 200 per cubic millimetre of blood.

This makes it easier for infections to set in. AIDS is the final stage of the HIV infection. In some persons it can take up to 10 years after the initial infection for the disease to set in.



How HIV spreads

HIV does not live long outside the body, so it can spread only when a person comes in direct contact with the body fluids of an infected person. HIV spreads through blood, semen, vaginal secretions and breast milk. It does not spread through saliva, tears, sweat or urine; these fluids contain very little HIV.

Exposure—the act of coming into contact with an infected person through high-risk behaviour—can be of two types. Direct exposure is when the contact is between the uninfected person and an infected person. A person is said to be indirectly exposed to all those persons his/her partner has had sexual relationship with.

Modes of transmission

Sexual contact: This is the most common form of HIV transmission. Risk of contracting the infection is high when infected blood, semen or vaginal secretion comes in contact with the blood or mucous membrane of the healthy person. Though vagi-

• nal contact is risky and the most
• common form of transmission of
• infection, anal intercourse is
• riskier because the rectum, when
• penetrated, tears more easily
• than the vagina, making close
• contact with body fluids possible.

• **Blood transfusion:** Since HIV can



be transmitted through transfusion of infected blood, testing for HIV is mandatory when one donates blood. Moreover, in India the collection of blood from professional donors has been banned. Donating blood is safe as long as the equipment used is sterile. Intravenous drug users can contract the infection by sharing needles with an infected person. Tattooing and body

• piercing with infected instruments can be risky.

• **Mother to child:** An infected woman can spread the virus to her baby during pregnancy, childbirth or lactation. There are 13-40 per cent chances of transmission of HIV from mother to child. With increasing infection among antenatal women, paediatric AIDS is poised to be-



come a major health problem.

During pregnancy the maternal blood does not enter the placenta. But during childbirth, labour contractions cause tears in the placenta and the foetus' blood comes in contact with the mother's. The foetus also comes into contact with the mother's genital secretions. There have been cases where the HIV was found in the foetus and the amniotic fluid. An infected mother can also transmit the virus through breast milk.

Though blood transfusion is the most risky, the incidence of HIV through sex is high because sexual activity is the most common of these modes.

STD and HIV

Growing evidence from around the world indicates that incidence of HIV is higher if the person has sexually transmitted diseases (STD). A person with STD has greater risk of contracting HIV though sexual intercourse with an infected person than a healthy person because they may have open sores on their genitals and the infection can enter through these pores. India has a high incidence of STD in both rural and urban



You cannot get HIV infection

- From social kissing (closed mouth). Deep open mouthed kissing is not completely safe.
- From shaking hands with the infected person.
- From hugging.
- From sharing the same air with infected persons at public places as cinema, shopping complex, office or school.
- From clothes, beds or toilets.
- From sharing food or dishes.
- From caring for an AIDS patient, such as bathing them, feeding them or cleaning them.
- From mosquitoes, flies or bedbugs. HIV cannot live and multiply in the mosquito.

HIV cannot survive for long outside the human body. It dies when dried, exposed to heat and in contact with detergents.

areas. In Mumbai, HIV infection is 50 per cent among sex workers and 36 per cent among STD patients.

STD control

Programme for control of STD in India has been in force since 1946. This programme went on till 1991 till it was brought under NACO in 1992 with the spread of HIV/AIDS in the country and also because STD has a strong relation with AIDS.

Everyone needs to learn about AIDS/HIV because the infection is spreading fast and is not restricted to prostitutes or their clients, or gays or drug users who share needles. Many people may be exposed to HIV

Sources of HIV infection in India

Heterosexual activity	81.0%
Mother to child	0.7%
Blood transfusions	5.5%
Intravenous drug users	5.2%
Others	7.6%

Source: Combating HIV/AIDS in India 1999-2000, NACO

- infection unknowingly. Persons like housewives belonging to the non-high risk group have been found infected. However, people falling under the high-risk behaviour category are more vulnerable: those who have multiple partners have a greater chance of contracting the infection.



Symptoms

People with infection start showing symptoms any time from 6 months to many years. Most people get a short illness soon after infection, but usually do not know this is HIV. An HIV test 3-6 months later will show that the person is HIV positive.

Then they may go on for years together without showing symptoms. But they get cold and fever occasionally. Once infected the person remains a carrier all his/her life.

Early symptoms include swollen glands in the neck, groin and armpits. The patient will have recurrent cold, cough, fever, headaches or diarrhoea. Weight loss, skin rashes, prolonged unexplained fatigue, mouth infections, chills, sweating at night, shortness of breath, specific opportunistic infections and tumors are other symptoms. Women develop persistent yeast infections and STDs.

The final stage of the infection is called AIDS when the patient shows at least two major symptoms and one minor symptom.

Major symptoms

- Weight loss: The patient loses more than 10 per cent of body weight.
- Diarrhoea: The patient has persistent diarrhoea for more than one month.
- Fever: It continues for more than one month.

Minor symptoms

- Cough for more than one month
- Itching on the skin
- Skin rashes called shingles
- Herpes simplex
- Swollen glands
- Fungal infections of the mouth

- Other additional symptoms are speech impairment, muscle atrophy, memory loss and decreasing intellectual ability, sluggish movements and anxiety.
- There can be swelling and stiffness of joints, bone pain, muscle atrophy and numbness. The HIV positive will also have problems with vision, such as blurred vision, double vision, light sensitivity, decreased vision and blind spots in vision. They may experience chest pain, pain in the sides back and abdomen. There will be

loss of appetite.

Besides the symptoms a person with AIDS will have a CD4 cell count below 200 cells per cubic millimetre of blood.

However, it is not possible to go by the CD4 count always so often opportunistic infections are the yardsticks. The ailments that affect HIV infected people are of two types—opportunistic infections and aggressive cancers.

Opportunistic illnesses

Candidiasis and Cryptococcus meningitis:

Candidiasis is often the first sign of AIDS. Caused by the yeast *Candida*, usually present in the mouth, digestive tract, vagina and skin, the infection appears in the mouth as white patches. It can also infect

the skin, digestive tract and vagina causing itching, redness, burning and discharge. It can also affect the penis.

This infection is usually treated by applying antifungal medication on the affected area. Eating a lot of garlic is said to be an effective remedy, since garlic has been found to be an antifungal and anti-bacterial agent.

Cryptococcal meningitis is caused by fungus *Cryptococcus neoformans*. It lives in birds and is found in the soil and air, and infects people whose CD4 count has fallen below 200.

Gastrointestinal infections: Very common and prolonged among HIV positive people, it is mostly caused by protozoans. The in-

According to NACO a person is said to have AIDS if he/she:

- ◆ Tests positive for HIV infection in two tests based on different antigens
- ◆ Loses 10 per cent of body weight for no reason
- ◆ Has chronic diarrhoea for over a month
- ◆ Develops neurological impairment which restricts daily activity
- ◆ Has tuberculosis, Candidiasis or Kaposi's Sarcoma

fection reaches the body through unwashed or uncooked food, contaminated water and soiled hands. Symptoms include abdominal cramps, pain, bloating, fever, weight loss and vomiting.

Herpes Simplex Virus: It is transmitted by close personal contact, even through saliva. Though it affects both infected and healthy people, in the HIV positive it causes severe blisters which heal slowly and recur.

Pneumocystis carinii pneumonia: One of the most common infections among HIV positive in western countries, it occurs when CD4 counts falls to 200 and below.

Some HIV positive people whose immune systems become very weak with the CD4 count falling 75-100 contract the cytomegalovirus disease. It is transmitted through close personal contact and infects the eyes, nervous system, liver and lungs.

In India, the HIV positive often develop skin infections. Ring worm is one common infection, caused by a fungus. Other

• fungal infections are the dhobi's
• itch affecting the scalp and the
• groin area and athlete's foot be-
• tween the toes. Tuberculosis is
• the most common opportunistic
• infections among the HIV posi-
• tive in India.

• Cancers

• **Kaposi's Sarcoma:** Common
• among middle-aged men of
• Mediterranean or Eastern Euro-
• pean descent. Manifests as blue
• or brown patches or nodes on the
• skin. In the US it is found among
• homosexuals. It spreads fast
• though not life threatening by
• itself.

• **Non-Hodgkin's Lymphoma:** It is the
• cancer of the lymphocytes. When
• lymphocytes get damaged they
• fail to respond to signals for di-
• viding or stop dividing. As a re-
• sult they produce a mass of cells
• that go on dividing and spread to
• other parts of the body.

• **Cervical cancer:** It is caused by
• viruses like the human papilloma
• virus, the herpes virus and the
• HIV. The virus infects the cervi-
• cal cells and alter their structure.
• This becomes cancer and spreads
• to other parts of the uterus.



Detection

It is difficult to diagnose HIV infection based only on symptoms because most of these symptoms are common to other health problems as well. So it is better to take a blood test to confirm HIV infection.

The blood of an HIV infected person has antibodies, which are produced as a reaction to the HIV infection. The presence of the antibodies in the blood indicates infection. The two major tests for diagnosing HIV infection, Enzyme Linked Immunosorbent Assay (ELISA) and the Western Blot analysis, work by looking for antibodies, rather than for the virus.

For the test, the blood is separated into blood cells and serum; the antibodies are present in the serum. Since the body takes time to make enough antibodies to show on the test, a test is accurate only if done after three months of the infection.

Procedure for testing HIV infection

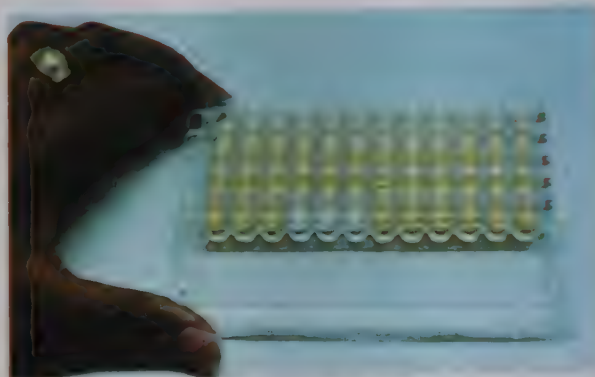
The serum sample is first tested with one ELISA or Simple/Rapid

assay. Reactive sample is retested using a different assay and then tested a third time. Serum found reactive in all the three tests is considered HIV positive.

If the serum is found reactive in the first two tests but non-reactive in the third, it is better to take another test after a minimum of two weeks. For confirmation the serum may be sent for a Western Blot analysis.

ELISA

There are direct, indirect, competitive, sandwich types of ELISA tests. First the serum is added to the HIV antigen. After allowing sufficient time for the serum to react with the antigen, it is washed. An enzyme that attaches to the anti-HIV antibodies is then added followed by chemicals that react with the enzyme to give a colour. The serum sample is then washed. If it takes a colour, it means the serum is HIV positive. The colour indicates that the enzyme has attached to the antibodies present in the serum. A negative sample shows no colour. The enzyme in this case, in the



Blood samples after an ELISA test

absence of antibodies to attach to, get washed away.

ELISA can show a false positive result in people with low immunity levels because of other disease like blood cancers and auto-immune diseases. Similarly, it can show a false negative result if the sample was taken in the first three months following the infection when there wouldn't be enough antibodies in the blood.

Western Blot

This test uses electrophoresis, a technique where molecules are separated based on their rates of migration in an applied electrical field. For the test, the HIV proteins are purified and separated in a semisolid medium. The proteins appear as bands depending on the rate of migra-

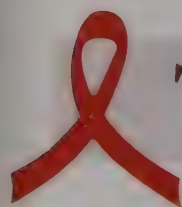
tion of the molecules. These are then transferred on to a filter paper.

Now the patient's serum is placed on the paper strip and allowed to react with the HIV proteins. The bands that have antigens binding to antibodies show colour. No colour appears where there

are no antibodies. A false negative result appears usually during the first six months of the infection or the final stages of AIDS when the immune system no longer produces enough antibodies.

Rapid tests

There are also rapid tests which provide results in 30 minutes. These are useful in rural areas where labs and other testing facilities may not be available. The results of the rapid tests should be later confirmed through lab tests. All HIV tests should be accompanied by pre test and post test counselling. However, counselling should follow a positive result, educating the person on how to cope with the infection and how not to spread it.



Treatment

Though there is no cure for AIDS at present, treatments are available to improve the quality of life of the individuals. The patients can follow lifestyles that help them remain healthy and strong. If a person has HIV-related symptoms, he/she should see a doctor and get tested for HIV.

Treatment includes antiviral therapy, which suppresses the replication of the HIV infection in the body using three drugs known as cocktail therapy.

Opportunistic infections are treated as they occur. Preventive medications to avoid opportunistic infections such as *Pneumocystis carinii* pneumonia are also available.

Joining support groups often helps people overcome other symptoms like stress and anxiety associated with the illness.

However, the combination therapy offered for AIDS has been found to have serious side effects like nerve damage, accumulation of fat in the neck and abdomen and diabetes. In some people it has given rise to high

levels of cholesterol and heart diseases as a consequence. Following a growing concern regarding the toxic effects of AIDS therapy, the US Federal Health Authority recently issued guidelines that treatment for AIDS should be delayed as long as possible for people without symptoms.

An alternative group of researchers believe that AIDS is the result of a suppressed immune system. The suppression is the result of repeatedly attacking the immune system with antibiotics, drug abuse, nutritional stress and anal sex, which build up toxins in the body. Studies have shown that the damage caused to the immune system by the HIV virus can be reversed to a great extent if people change their habits, eat nutritious food and practise hygiene. Such people tend to live healthier and longer than other HIV infected people.

Take care of them

The infection does not spread if you are only taking care of the

patient.

Treat symptoms through normal remedies. For instance, treat cold with home remedies like steam inhalation and medicated tea and headache with paracetamol.

- Honey or lemon could help get relief from sore throat. For diarrhoea, give salt/sugar solution or rice gruel to prevent dehydration.

- Give paracetamol (as prescribed by the doctor) or other



pain relievers for headache and body ache. Use soothing lotions like calamine for itching skin.

Yeast infection can be controlled by applying vinegar-water or gentian violet. Emphasise personal hygiene and avoid antibiotics.

Encourage the person to eat small meals throughout the day to fight weight loss. Give them a high calorie and protein rich diet consisting of dals, groundnuts and cereals. Help the patients keep track of their life. Tell them to take rest and reduce stress.

Every small gesture makes a difference. Never blame the patient for the disease.

Eat well to stay healthy

It is important to eat nutritious food, which gives vitamins, energy and the strength to fight the disease.

A person with HIV should see a doctor if he/she has diarrhoea, does not feel hungry or is losing weight.

To avoid infection from food,

- drinking water in a clean and covered vessel. Boil the water if it is not safe. Before eating raw fruits or vegetables, wash them thoroughly. Do not eat food kept uncovered for long. Wash the dishes with soap or detergent.

Pay attention to hygiene

- HIV positive people should avoid going near people with cold, fever or other infections. Family members of an HIV positive person should make sure to get their infections treated quickly and to avoid passing it on.

- People with HIV infection should not have sex without condoms. This is to avoid contracting STDs and HIV reinfection. Dispose of the used condoms and menstrual pads carefully, sealed in a bag.

- Wash hands with soap before eating and cooking and after going to the toilet. Bathe every day and brush teeth twice daily. Keep the surroundings clean and keep windows open to let fresh air in. When things are clean there are less germs.



HIV and children

In the next few years in India, tens of thousands of children will be born with HIV. Children with HIV in developing countries are at a greater risk because poor nutrition and widespread diseases make survival difficult.

Foetus in the womb and infants often get the infection from an infected mother. If the baby is

infected there are chances that the mother also has the infection. Or if the mother tests HIV positive, the child should also be taken for a test.

Symptoms in children

Many babies with HIV show symptoms by the time they are six months old. If a child is continuously ill for apparently no



reason, he/she should be taken to the doctor and tested for HIV. But the test does not work till the baby is 18 months old.

Children born with HIV usually develop AIDS by the time they are two years old, and die before they are five. Only a very small percentage survive till five. Since their immune system is still developing, children tend to contract infections quickly and succumb to it faster than adults. The common infections in children are bacterial, such as meningitis.

- Viral infections like chicken pox and measles keep recurring.

- Children with HIV should have regular check ups. Infants should be breastfed as breast milk provides all necessary nutrients and builds their immune system.

- Children should be given normal, healthy food and allowed to live as normal a life as possible. They can play with other children. Risk arises only when they get wounded and the blood falls on another child's open wounds.



The signs are

- ◆ Low birthweight
- ◆ Persistent diarrhoea
- ◆ Slow growth
- ◆ Slow physical and mental development
- ◆ Persistent fever and cough
- ◆ Mouth infections



Living with HIV

According to the UNAIDS, by last year 36.1 million people around the world were living with the HIV, 16.4 million of them being women and 1.4 million children.

However, the fight goes on. People infected with HIV can continue to live a socially useful life and help in stopping the further transmission of the disease. They need the support of family and the community.

The HIV positive should be told that they can live a healthy life for a long time before they get sick. They should follow a controlled lifestyle, should not donate blood or have sex. If they have sex they should use condoms. They should not share injection instruments.

The HIV infected need proper care and should get medical check ups done regularly. Patients should preferably quit smoking, heavy drinking or using drugs. They should get enough rest and be positive in their outlook. Encourage the HIV positive to be as self reliant for as long as they can. This would make them feel in control of their lives.

What every person dreads is being discriminated against, and discriminating against the HIV positive can have a negative impact on the patient. It can force the patient to run away which means he/she will never get proper care and education on HIV/AIDS and may end up passing the infection to other people.

Age and sex distribution of AIDS cases in India

(May 1986-March 2000) n=11251



Source/NACO



Protect yourself

Most people still do not have a complete picture of HIV/AIDS and many do not know the link between STD and AIDS. In the absence of a cure, prevention continues to be the most effective strategy in the control of AIDS. Only intensive communication efforts can raise awareness levels and bring about behavioural changes. STD services, condom programming and blood safety are the components of the programme adopted by NACO.

Preventive measures

HIV infection can be prevented by avoiding multipartner sex, condom use, using separate syringes and needles or sterilising

the instruments before use and voluntary donation of blood.

- Using condoms, correctly and everytime, greatly reduces the risk of getting the infection through sexual intercourse.
- Avoid sex with people who are involved in high-risk activities.
- Do not share razors, needles or other skin piercing instruments.
- Always insist on sterilised tools be it syringes, surgical instruments, or instruments used by the barber.

Blood products like plasma, Factor 8, Rh Factor, immunoglobulin and interferon also should not be accepted until one is sure that they have been screened for HIV.

Donating blood does not carry the risk of transmission of HIV infection as the needles used for these purposes are sterile. You could rule out the risk of acquiring HIV infection when you go in for a blood-test if the equipment used is sterile. Remember that blood, which includes menstrual blood of an HIV positive



woman, is infective.

Medical personnel are at a minimal risk of acquiring HIV infection as they have to deal with blood. But the risk can be further minimised if precautionary measures such as use of gloves, masks and goggles, are taken when handling infected material. Dried blood is not infective as HIV cannot live long outside the body and cannot survive in a dried form.

Never share syringes or needles. If you must, sterilise the instrument with bleach or by boiling after every use.

How to clean syringes

Flush the syringes with clean, cold water. This removes the blood in the syringe before it clots.

If you want to clean it with bleach, fill the syringe with undiluted bleach drawn up through the needle. Leave for half a minute and empty the syringe into a drain. Repeat the process and rinse clean the syringe with cold water. If you don't have bleach use detergent and rinse with cold water.

If the syringe is made of glass

How to avoid AIDS

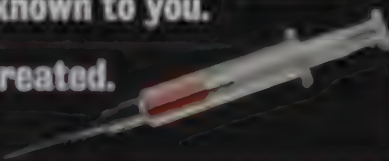
Use condoms.

Use disposable syringes and needles.

Avoid multi-partner sex.

Ensure the blood is HIV free before transfusion. If possible avoid taking blood donated by strangers; get blood from your family members or people known to you.

Get STDs treated.



- put the needle and syringe in
- water and boil it for 20 minutes.
-
- **Be careful**
- Be careful while handling body
- fluids of HIV/AIDS patients. If
- you're touching the patient's body
- fluid, wash your hands with soap
- and water immediately. Disin-
- fect spilled blood, stool or urine
- using bleach. Wrap it up with
- paper and flush it down the toi-
- let. Handle soiled or blood-
- stained clothes with care. Soak it
- in bleach solution or boil to kill
- the germs. Wash with soap. Gar-
- bage that is infectious should be
- wrapped well and disposed.



Common queries

Can blood transfusion transmit HIV?

Yes. Blood taken from an HIV positive person can infect the receiver. Make sure that the blood has been screened for HIV by a licensed blood bank.

What are blood products and how can one ensure that they are uninfected?

Blood products include red blood cells, platelets, plasma, albumin and immunoglobulin. If any of these is taken from an HIV positive person, the products may be infected. Always verify that the blood products have been screened for HIV.

Can one acquire HIV infection at a blood test?

Blood tests are usually done using sterile instruments. However, when you go for a blood test, check if the syringe and needle are sterile. You can ask for disposable syringes.

How do you know if the instruments are sterile?

Always ask the doctor or the

nurse if the syringes are sterile before an injection or blood test.

Can one acquire the infection by donating blood?

No. Instruments used for blood donation are sterile. In fact, healthy people should come forward to donate blood.

Is menstrual blood infective?

Yes. Any blood which is infected with HIV can pass on the infection.

Is tattooing, ear piercing and shaving dangerous?

All this could be dangerous if the instruments are not sterile. So always insist on a fresh instrument. Ask the barber to use a fresh blade for shaving. Sharing razors holds some degree of risk if it has been used by an HIV infected person and has not been cleaned thoroughly. It is advisable not to share razors.

Do mosquitoes transmit HIV?

There is no evidence to indicate that mosquito bite can transmit the disease. The incidence of HIV

is highest among the sexually active age group of 15 to 40 years. If mosquito bite could transmit the virus, the infection should have been uniform among all age groups. The HIV virus cannot survive or replicate inside a mosquito.

Can kissing transmit the infection?

Light kissing on the cheeks or on the lips carries no risk of transmitting HIV. Deep kissing can be risky because the saliva of the infected person contains the virus, though very few. Moreover, there could be bleeding gums or ulcers in the mouth and exchange of saliva mixed with infected blood could transmit the infection.

Does a checkup by the dentist hold any risk?

Even though the risk is very low,

- you can always ensure that the instruments have been sterilised before use.

For how long does the virus survive after a patient dies?

- This depends on the temperature in which the body is kept. In cases where the body has been kept in cold storages, there have been reports of the virus surviving for more than a week. The dead body must be covered with double layers of thick polythene sheets with bleach in between each layer.

Can complete blood transfusion cure the infection?

- No, because the virus is present in tissues and organs like liver, brain and spleen, besides blood. So the virus cannot be completely eliminated from the body.



Helpline

There are governmental and non-governmental organisations that work for the control and prevention of AIDS in India.

NACO is the nodal agency for policy-making and implementation of programmes for the prevention and control of AIDS in the country. With no vaccine or cure in sight, information, awareness and education are the best ways to prevent the disease from spreading.

National AIDS Control Organisation, Ministry of Health & Family Welfare, Government of India, 9th floor, Chandralok building, 36, Janpath, New Delhi-110 001.

email: asec-jvr@hub.nic.in

Web site: www.naco.nic.in

There are also AIDS control societies in all the states and Union Territories. Some of these are:

Andhra Pradesh State AIDS Control Society, Directorate of Medical & Health Services, Sultan Bazar, Hyderabad-500059.

Phone: 040-4650365

Assam State AIDS Control Society, Khanapara, Guwahati. Phone: 0361-620524.

Bihar State Aids Control Society, Health Department, Patna-15. Phone: 0612-223167, 290278.

Dilli AIDS Niyantran Samiti, 11, Lancers Road, Mall Road, Timarpur, Delhi-110054. Phone: 011-3866763.

Goa State AIDS Control Society, Directorate of Health Services, Campal, Panaji-403001. Phone: 0832-437286.

Gujarat State AIDS Control Society, Old Cardiology Building, Civil Hospital, Ahmedabad. Phone: 02712-37772, 38293, 38294.

Haryana AIDS Control Society, SCO 10, Sector 10, Panchkula. Phone: 0172-585413, 563488.

Jammu & Kashmir State AIDS Control Society, Mini Block, Civil

Secretariat, Jammu. Room No. 342, III Floor, Civil Secretariat, Srinagar. Phone: 0194-452262.

Karnataka State AIDS Control Society, No. 13, 5th Main, 10th cross, 12th Block, Kumara Park (west), Bangalore-560020. Phone: 080-2277391.

Kerala State AIDS Control Society, IPP Building, Red Cross Road, Thiruvananthapuram-695037. Phone: 0471-327865.

Madhya Pradesh State AIDS Control Society, OILFED Building, 1 Arera Hills, Bhopal 462011. Phone: 0755-553481

Maharashtra State AIDS Control Society, Ackworth Leprosy Hospital Compound, Behind SIWSCollege, R.A. Kidwai Marg, Wadala (west), Mumbai. Phone: 022-4113035, 4113097, 4115619.

Manipur State AIDS Control Society, Medical Directorate, Lamphelpat, Imphal. Phone: 0364-223140.

Nagaland State AIDS Control Society, Health & Family Welfare Deptt. New Secretariat Building, Kohima. Phone: 0370-

222626, 233027.

Orissa State AIDS Control Society, Directorate of Health Services, Bhubaneshwar. Phone: 0674-410840.

Punjab State AIDS Control Society, SCO No. 481-82, Sector 35-C, Chandigarh. Phone: 0172-669322, 669324.

Rajasthan State AIDS Control Society, Medical & Health Directorate, Swasthya Bhavan, Tilak Marg, C Scheme, Jaipur-5. Phone: 0141-381707.

Tamil Nadu State AIDS Control Society, 417, Pantheon Road, Egmore, Chennai. Phone: 040-8255261, 8254917, 8255467.

Uttar Pradesh State AIDS Control Society, II Floor, Maternity Home, Naval Kishore Road, Hazratganj, Lucknow-226001. Phone: 0522-231575.

West Bengal State AIDS Prevention & Control Society, P-16, India Exchange Place Extension, CIT Building, Kolkata. Phone: 033-2256845.

Some of the NGOs working in

AIDS control are: AIDS Awareness Group, 119, Humaynpur, Safdarjung Enclave, New Delhi-29. Phone: 011-6187953.

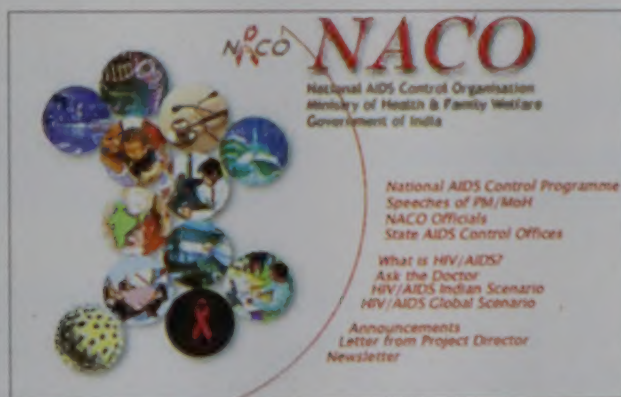
The Ford Foundation, 55, Lodi Estate, New Delhi. Phone: 011-4619441.

Indian Red Cross Society, Red Cross Building, 1 Red Cross Road, New Delhi-1. Phone: 011-

3710429.
email: ires @irc.unx.ernet.in.

United Nations Development Programme, Project on HIV and Development, 13, Jor Bagh, Ground Floor, New Delhi-3. Phone: 011-4632339.

UNIFEM, National Programme Office (Gender & HIV/AIDS), 223, Jor Bagh, New Delhi-3.



Check the Web for information on HIV/AIDS

www.naco.nic.in

www.unaids.org

www.unaids.org.in

www.who.org

<http://unaidsapict.inet.co.th/>

<http://www.positiveaction.com>

www.avert.org

www.youandaids.org

www.youandaids.net

www.cdc.gov (Web site of the Center for Disease Control-Atlanta)

Phone: 011-4698297.

Gujarat AIDS Awareness & Prevention, BO2, Siddhachakra Apts, Ellis Bridge, Ahmedabad. Phone: 079-2866695.

Jagruthi, Jyothi Complex, c-3, II floor, 134/1, Infantry Road, Bangalore. Phone: 080-2860346.

Karnataka Network for People Living with HIV/AIDS, P.O. Box 2325, Bangalore.

CSRD-ISIT Project, 34/767, Lyyapadi House, Malaparamba, Civil Station, Kozhikode. Phone: 0495-371376.

AIDS Research & Control Organisation, STD Building, JJ Hospital, Mumbai. Phone: 022-3742193.

Rotary-UNAIDS Cooperation Programme on HIV/AIDS, RRR Industries, A/109, ANSA Industrial Estate, Saki-Vimar Road, Mumbai. Phone: 022-8521974.

• Tata Institute of Social Sciences, Sion-Trombay Rd, P.O. Box 8313, Deonar, Mumbai. Phone: 022-5563290-3296.

• Lifeline Foundation, P.O. Box 118, Keishamthong, Top Leirah, Imphal. Phone: 0385-224186.

• AIDS Prevention & Control Project, Voluntary Health Services, Adayar, Chennai. Phone: 044-2541965.

• Indian Network for People Living with HIV/AIDS, 6, Kasturba Towers, 93, South West Boag Road, T. Nagar, Chennai. Phone: 044-4329580. email: inppplus@vsnl.com

• STD/HIV Intervention Programme & USHA Multipurpose Cooperative Society, 8/2, Bhawani Dutta Lane, Kolkata. Phone: 033-2416200.

• AIDS Prevention Society of Punjab, 1058/1, Sector 39, Chandigarh. Phone: 0172-69631

THE WEEK SUPPLEMENT

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USE ME



**ALWAYS USE A CONDOM TO PROTECT
YOURSELF FROM ACQUIRING HIV THROUGH
SEXUAL INTERCOURSE**

It's really quite simple, AIDS is an incurable disease that spreads primarily through unprotected sexual contact. Using a condom during sexual intercourse is the only way to protect yourself against this deadly threat. And it's best if you stick to only one partner and avoid casual sex. So for your own sake practice safe sex and remain AIDS - free.

AIDS

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